

REMARKS

Claims 2-11, 13-20, 22-33, and 35-72 are pending in this application. Claims 2-11, 13-20, 22-32, 35, 36, 38-44, and 46-57 are allowed. Claims 33, 58-64, and 68-72 are rejected. Claims 37, 45, and 65-67 are objected to. Claims 45, 58, 68, 70, and 71 have been amended. The amendments to claim 58 are supported by claim 58 as originally filed and page 6, lines 1-4, and page 12, lines 1-5 of the specification. The amendments to claims 68 and 71 are supported by claims 68 and 71 as originally filed and page 1, lines 15-27, and page 11, lines 24-32 of the specification. The amendments to claims 45 and 70 merely correct a typographical error.

Reconsideration and allowance of the claims is respectfully requested in view of the foregoing amendments and the following remarks.

1. Claims 68, 69, 71 and 72 were rejected under 35 U.S.C. § 112, first paragraph for allegedly lacking enablement.

Claims 68, 69, 71 and 72 were rejected under 35 U.S.C. § 112, first paragraph for allegedly lacking enablement. According to the examiner the specification, while enabling for epilepsy, does not enable the prevention of seizures or depressing the central nervous system. Furthermore, the examiner asserted that applicants' arguments submitted in response to the examiner's previous Office Action, were found not persuasive. Applicants submitted that the PDR provides that oxcarbazepine is currently marketed as TRILEPTAL[®] for the treatment of epilepsy. The Physician's Desk Reference (PDR) teaches the clinical pharmacology of oxcarbazepine as follows:

In vitro electrophysiological studies indicate that [oxcarbazepine and its metabolite] produce blockade of voltage-sensitive sodium channels, resulting in stabilization of hyperexcited neural membranes, inhibition of repetitive neuronal firing, and diminution of propagation of synaptic impulses. These actions are thought to be important in the prevention of seizure spread in the intact brain. In addition, increased potassium conductance and modulation of high-voltage activated calcium channels may contribute to the anticonvulsant effects of the drug.

Physician's Desk Reference, 59 ed., 2005, p. 2380. Further, oxcarbazepine and its active metabolite exhibit anticonvulsant properties in patients. *Id.* Moreover, applicants submitted that the oxcarbazepine of the invention, when absorbed in blood, produces the same pharmacological effect as oxcarbazepine marketed under TRILEPTAL[®]. Furthermore,

in response to the examiner's assertion that no screening protocols or working examples are provided, applicants submitted that the PDR discloses numerous clinical studies performed to determine the effectiveness of oxcarbazepine. Four randomized, double-blind, multicenter trials were performed to demonstrate the efficacy of oxcarbazepine as monotherapy.

5 *Physician's Desk Reference*, p. 2381, col. 2. In addition, the effectiveness of oxcarbazepine as an adjunctive therapy for partial seizures was established in two multicenter, randomized, double-blind placebo-controlled trials. *Physician's Desk Reference*, p. 2381, col. 3. The examiner notes that the information and instruction in the PDR for the use of oxcarbazepine in the treatment of epilepsy is vast. The examiner asserts however that the claim language
10 encompasses more than the prevention or reduction of epileptic seizures. In addition, according to the examiner not all diseases and disorders claimed are treatable, let alone preventable.

Applicants submit that claim 68, as amended, is directed to treating a patient suffering from seizures comprising administering oxcarbazepine of the present application in a
15 pharmaceutical composition. Claim 68, as amended, is supported by the specification on page 1, lines 26-27, and page 11, lines 26-27. Moreover, applicants submit that the pharmaceutical compositions comprising oxcarbazepine of the present application dissolve and produce in the blood stream the oxcarbazepine 10-hydroxy metabolite which primarily exerts the pharmacological effect. The pharmaceutical composition comprising oxcarbazepine
20 TRILEPTAL®, described in the PDR and referenced in the specification, also dissolves and produces in the bloodstream this 10-hydroxy metabolite which primarily exerts the pharmacological effect of oxcarbazepine. Thus, a person of skill in the art would know from the disclosure and what is known in the art, the PDR, how to use the pharmaceutical composition of oxcarbazepine of the present invention in treating patients suffering from
25 seizures. Applicants therefore submit that claim 68, as amended, is enabled as under 35 U.S.C. §112, first paragraph. Claim 69, is dependent from claim 68, and is submitted to be allowable based on its dependency from claim 68. Furthermore, claim 69 is directed to treating a patient suffering from epileptic seizures comprising administering oxcarbazepine of the present application in a pharmaceutical composition. Applicants submit that the examiner
30 noted that the treatment of epilepsy by administering a pharmaceutical composition of the present invention is enabled by the disclosure in the specification.

Similarly, applicants submit that it is commonly known in the field that drugs for the treatment of seizures, i.e. oxcarbazepine, are central-nervous system depressants. Therefore,

claims 71, as amended, and 72, directed to a method of treatment for depressing the central nervous system are also enabled by the specification for the same reasons.

Therefore, applicants submit that, claims 68, 69, 71, and 72, as amended, are fully enabled by the specification. Withdrawal of the rejection is respectfully requested.

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2. Claims 58-64, 68, 69, and 71 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Schindler, (U.S. Patent No. 3,716,640).

Claims 58-64, 68, 69, and 71 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Schindler, U.S. Patent No. 3,716,640. According to the examiner a polymorph is a specific crystal form of a compound, but a pharmaceutical composition of a polymorphic form as a non-solid no longer possesses its crystalline properties. Furthermore, the examiner asserted that applicants' arguments submitted in response to the examiner's previous office action were considered but found not persuasive. Applicants submitted that claims 58-64, 68, 69, and 71 encompass pharmaceutical compositions comprising oxcarbazepine forms of the invention. Pharmaceutical compositions of the invention comprise the oxcarbazepine polymorphs in solid form where their crystalline structures are retained. For example, compositions in tablet, powder, gel, capsule or suspension forms contain polymorphs as solids. Further, applicants submitted that even if polymorphic forms may be lost when absorbed into the blood, the pending claims are not directed to oxcarbazepine in blood but instead to oxcarbazepine in a pharmaceutical composition prior to absorption. The examiner asserts that applicants are not specifically claiming solid pharmaceutical compositions but pharmaceutical compositions in general.

Independent claim 58 has been amended merely to more clearly define the subject matter of the present invention. Applicants submit that claim 58, as amended, requires the pharmaceutical composition to contain crystalline oxcarbazepine. The crystalline oxcarbazepine is selected from the crystalline forms of the present invention. The crystalline forms and structures of oxcarbazepine in the pharmaceutical compositions of the present invention are therefore required to be retained. The Schindler reference fails to disclose the crystalline oxcarbazepine forms of the present invention nor does it disclose pharmaceutical compositions comprising them. For this reason applicants submit that claim 58, as amended, is not anticipated by Schindler. Furthermore, claims 59-64 are dependent from claim 58 and claims 68, 69, and 71 are directed to administering the pharmaceutical composition of claim 58 and are thus also not anticipated by the Schindler reference by virtue of their dependency from claim 58.

Therefore, applicants submit that claims 58-64, 68-69 and 71 are not anticipated under 35 U.S.C. §102(b) by Schindler. Withdrawal of the rejection is respectfully requested.

3. Claims 33, 58-64, and 68-71 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Boireau et al., (U.S. Patent No. 5,658,900).

Claims 33, 58-64, and 68-71 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Boireau et al., U.S. Patent No. 5,658,900. The examiner asserts similarly to her rejection of claims 58-64, 68, 69, and 71 over Schindler that a polymorph is a specific crystal form of a compound, but a pharmaceutical composition of a polymorphic form as a non-solid no longer possesses its crystalline properties. Furthermore, the examiner asserted that applicants' arguments submitted in response to the examiner's previous office action were considered but found not persuasive. In response to applicants' arguments that the pharmaceutical compositions of the presently claimed invention comprise the oxcarbazepine in solid form, the examiner asserts that applicants are not specifically claiming solid pharmaceutical compositions but pharmaceutical compositions in general.

Applicants submit that for the same reasons as discussed above, claims 33, 58-64, and 68-71 are not anticipated by the Boireau et al. reference, which discloses only a method of treating Parkinsonian syndrome using oxcarbazepine. Moreover, the Boireau et al. reference fails to state the type of oxcarbazepine polymorph used. Furthermore, the Boireau et al. reference fails to disclose any process for preparing the oxcarbazepine polymorphs, nor does it provide any examples relating to such preparation. Boireau et al. only cites to EP 50,589, which is published in German. Examples 1-3 in EP 50,589 seem to discuss only the preparation of pharmaceutical compositions, not the preparation of oxcarbazepine itself.

In addition, applicants submit that claim 33 is directed to an oxcarbazepine chloroform solvate as opposed to a solution of oxcarbazepine in chloroform. The present invention distinguishes oxcarbazepine chloroform solvate from a solution of oxcarbazepine in chloroform. Compare for example the disclosure on page 9, line 30 and page 10, lines 1-3 of the specification with the disclosure on page 10, lines 10-15. Therefore, an oxcarbazepine chloroform solvate of the present invention is a solid. The Boireau et al reference fails to disclose such solid oxcarbazepine having a chloroform solvate. Thus, claim 33 is not anticipated because Boireau et al do not disclose an oxcarbazepine chloroform solvate.

For these reasons applicants submit that claims 33, 58-64, and 68-71 are not anticipated under 35 U.S.C. §102(b) by Boireau et al. Withdrawal of the rejection is respectfully requested.

4. Claims 37, 45, and 65-67 were objected to.

Claims 37 and 45 are objected to for being dependent upon a rejected base claim 33. As mentioned above, applicants submit that claim 33 is not anticipated by either the Schindler or Boireau et al references. Furthermore, claim 45, as amended, is dependent from claim 38, which claim is allowed, as opposed to claim 37. Applicants submit that the amendment of claim 45 merely corrects a typographical error. Claim 45 is directed to an oxcarbazepine chloroform solvate produced by a claimed process. Not claim 37 but claim 38 is directed to such process of producing an oxcarbazepine solvate. Thus claim 45, as amended, correctly depends from allowed claim 38. Therefore, applicants respectfully request withdrawal of the objection to claims 37 and 45.

Claims 65-67 are objected to for being dependent upon a rejected base claim 60. According to the examiner the claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As mentioned above, applicants submit that claim 60 is not anticipated by either the Schindler or Boireau et al references. Therefore, applicants respectfully request withdrawal of the objection to claims 65-67.

Applicants acknowledge and appreciate that the examiner allowed claims 2-11, 13-20, 22-32, 35, 36, 38-44, and 46-57. If any outstanding issues remain, the examiner is invited to telephone the undersigned at the telephone number indicated below to discuss the same.

Respectfully submitted,

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